

REMARKS

Claims 1-7 and 9-26 are pending in the application. Claims 1-7 and 9-26 are rejected.

I. Rejection Based on Higashio et al. in view of Rogers

Claims 1-4, 6, 9-11 and 13-23 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Higashio et al. (US 2003/0072078 A1) in view of Rogers (US 2,263,249).

The Examiner states that Higashio a method of manufacturing a polarizing plate by laminating a transparent protective layer to a polarizing film, where the method of laminating includes utilizing an adhesive interposed between the polarizing plate and the protective layer. The Examiner also states that Higashio teaches that the adhesive layer thickness “in general” is in the range of 1 μ m to 500 μ m.

Higashio is missing at least the features of an “aqueous liquid” and the “thickness of the adhesive layer,” which the Examiner argues are disclosed in Rogers or are otherwise obvious. Rogers discloses the use of a water with a polyvinyl alcohol (PVA) sheet. The Examiner takes the position that the PVA sheet of Rogers is an “adhesive.” (Rogers, column 4, lines 40-45).

The claim 1 adhesive thicknesses are clearly outside the range set forth in Higashio. However, the Examiner continues to not acknowledge that the claimed adhesive thickness range of this application is *outside* the range set forth in Higashio.

Specifically, the adhesive thickness range in claim 1 is 30-300nm (0.00000003-0.0000003m) and the range of Higashio is 1-500 μ m (0.000001-0.0005m). Thus, the high end of the adhesive thickness range of Applicants’ claim 1 is over 3 times smaller than the low end of

the range of Higashio (i.e., $0.0000003\text{m} < 0.000001\text{m}$). Therefore, the two ranges do not overlap and the adhesive thickness range of claim 1 is not obvious in view of Higashio in further view of Rogers.

The Examiner alleges that, “the general concept of the adhesive layer is taught and it would have therefore been obvious to include the specific use of the thickness range of 30-300nm since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.” (Office Action, p. 4). Applicants respectfully submit that one of ordinary skill in the art would not have any reason to modify the thicknesses of Higashio by making them over 3 times smaller. The Examiner has not established how the prior art ranges are close enough that one skilled in the art would have expected them to have the same properties.

While, as set forth above, it is believed the Examiner has not established a *prima facie* case of obviousness, to advance the prosecution of the case, Applicants have provided declaration evidence regarding the claimed invention showing the improved properties of no observed stripe-shaped or dotted faults and other irregularities over the surface and a peel of less than 3 mm. See the attached Declaration under 37 C.F.R. § 1.132.

For example, according to Table 1 of the Declaration, the reduction in adhesive thickness to 31nm of Example 1, as compared with 330nm of Reference Example 1, provides the unexpected results of: no stripe-shaped or dotted faults observed (for Reference Example 1, stripe-shaped or dotted faults were observed all over the surface) and a peel of less than 3mm (for Reference Example 1, peel was greater than 30mm). The reference example’s use of 330nm is a

proper comparison as it is closer to the claimed range than the prior art range. Such changes are unexpected in view of the cited art.

Table 1 of the Declaration also includes Example 17 having an adhesive thickness of 31nm and Reference Example 2 having an adhesive thickness of 1000nm. Example 17 provides the unexpected results of: no stripe-shaped or dotted faults observed and a peel of less than 3mm. To the contrary, in Reference Example 2 stripe-shaped or dotted faults were observed all over the surface and the peel was greater than 30mm. The reference example in this comparison is also representative of the prior art because it is at the low end of the stated range of Higashio (1000nm = 1 μ m). The Example 17 adhesive thickness yielded observed results superior to that of Reference Example 2. Such changes are unexpected in view of the prior art.

In addition, the adhesive layer (thickness: 1-500 μ m) described in paragraph [0055] of Higashio is provided on the surface of the polarizing plate and/or the transparent protective layer. On the other hand, the adhesive layer (30-300nm) in the present application is provided on the polarizer and/or the transparent protective film in the production method of the polarizing plate. Namely, an object on which the adhesive layer described in Higashio is provided is completely different from an object on which the adhesive layer in the present application is provided, and this Higashio does not describe the adhesive layer used in the present application. Accordingly, it cannot be considered that the adhesive layer (30-300nm) used in the present application is obvious over the description of Higashio.

Further, regarding claim 11, the aqueous solution in Rogers is to moisten the PVA film for contact purposes. Rogers does not use a cross-linking agent. In addition, the Examiner

appeared to confuse the adhesive with the aqueous liquid in Higashio and the aqueous liquid is not obvious over Rogers, as already argued in the previous response.

As to the Examiner's argument on adding a cross-linking agent to the aqueous solution or to the adhesive, the Examiner is respectfully requested to provide support in the art for the statement that:

It would have been obvious...to have utilized the cross-linking agent as disclosed by Higashio alternatively dissolved in the aqueous liquid of Rogers because general knowledge in the state of the art of cross-linking agents would have provided that it was merely important to have the cross-linking agents and the adhesive mated at the time of curing and may have found the alternative more appealing in cases where the aqueous liquid was able to more easily dissolve the agent. (Office Action, pg. 5).

For the above reasons, it is respectfully submitted that the subject matter of claims 1-4, 6, 9-11 and 13-23 is neither taught by nor made obvious from the disclosures of Higashio et al, or Rogers et al., either alone or in combination, and it is requested that the rejection under 35 U.S.C. §103(a) be reconsidered and withdrawn.

II. Rejection Based on Higashio et al. and Rogers in view of either Applicant's admitted prior art or Shuichi et al.

Claim 5 is rejected under 35 U.S.C. §103(a) as being unpatentable over Higashio et al. and Rogers in view of either Applicant's admitted prior art or Shuichi et al. (JP 7198945).

Applicant's admitted prior art and Shuichi et al. do not overcome the deficiencies in the primary references discussed above.

III. Rejection Based on Higashio et al. and Rogers in view of either Okazaki et al. or general knowledge in the art

Claims 7 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Higashio et al. and Rogers in view of either Okazaki et al. (US 5,945,209) or general knowledge in the art.

Okazaki et al. and general knowledge in the art do not overcome the deficiencies in the primary references discussed above.

IV. Rejection Based on Higashio et al. and Rogers, and further optionally in view of Kanter

Claims 24-26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Higashio et al. and Rogers, and further optionally in view of Kanter (US 4,737,410).

Kanter does not overcome the deficiencies in the primary references discussed above.

In view of the above, Applicants respectfully submit that their claimed invention is allowable and ask that the rejections under 35 U.S.C. §103 be reconsidered and withdrawn. Applicants respectfully submit that this case is in condition for allowance and allowance is respectfully solicited.

Application No.: 10/573,706
Art Unit: 1791

Response
Attorney Docket No.: 062287

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
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